

F				Electrical					
	<b>F.1.0</b>			<b>VTPN DB</b>					
		a.1	16 Way VTPN DB - Kitchen Equipment+ Lighting+Power DB	Triple pole and neutral distribution board (VTPNDB with vertical busbar) with Double door surface/flush mounted comprising of following:- Incomer : 100A , TM based MCCB of 25kA with O/L, S/C & E/F Protection - 01 No <b>Outgoing :</b> 6/32A SP MCB - 24 Nos 6/32 Amp TP MCB- 8 Nos With all necessary connections	Each	0			
		a.2	12 Way VTPN DB - Kitchen Equipment+ Lighting+Power DB	Triple pole and neutral distribution board (VTPNDB with vertical busbar) with Double door surface/flush mounted comprising of following:- Incomer : 63A , TM based MCCB of 25kA with O/L, S/C & E/F Protection - 01 No <b>Outgoing :</b> 6/32A SP MCB - 18 Nos 6/32 Amp TP MCB- 6 Nos With all necessary connections	Each	0			
		a.3	8 Way VTPN DB - Kitchen Equipment+ Lighting+Power DB	Triple pole and neutral distribution board (VTPNDB with vertical busbar) with Double door surface/flush mounted comprising of following:- Incomer : 63A , TM based MCCB of 25kA with O/L, S/C & E/F Protection - 01 No <b>Outgoing :</b> 6/32A SP MCB - 12 Nos 6/32 Amp TP MCB- 4 Nos With all necessary connections	Each	0			
<b>Sub Total of F.1.0</b>									
	<b>F.2.0</b>			<b>TPN DB</b>					
		b.1	12 Way TPN DB - Kitchen Equipment+ Lighting+Power DB	DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125A. <b>Incomer :</b> 63A FP, MCB of 10kA - 01 No <b>Sub Incomer</b> 3Nos, DP, 63A, RCBO (30mA). <b>Outgoing :</b> 6/32A SP MCB - 30 Nos With all necessary connections	Each	0			
		b.2	8 Way TPN DB - Kitchen Equipment+ Lighting+Power DB	Triple pole and neutral distribution board (TPNDB) with Double door surface/flush mounted of 8 way (4+ 24 Module) 4 Horizontal Rows in 4 Vertical tiers configuration comprising of following:- DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125A. 8 Way TPN Double door type DB for Power comprising of following:- <b>Incomer :</b> 40A FP MCB,10kA - 01 No <b>Sub Incomer</b> 3Nos, DP, 40A, RCBO (30mA). <b>Outgoing :</b> 6/32A SP MCB - 18 Nos With all necessary connections	Each	0			
		b.3	6 way TPN DB	Triple pole and neutral distribution board (TPNDB) with Double door surface/flush mounted of 6 way (4+ 18 Module) 4 Horizontal Rows in 4 Vertical tiers configuration comprising of following:- DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125A. 8 Way TPN Double door type DB for Power comprising of following:- <b>Incomer :</b> 40A FP MCB,10kA - 01 No <b>Sub Incomer</b> 3Nos, DP, 40A, RCBO (30mA). <b>Outgoing :</b> 6/32A SP MCB - 12 Nos With all necessary connections	Each	0			
<b>Sub Total of F.2.0</b>									
	<b>F.3.0</b>			<b>SPN DB</b>					
		c.1	12 Way SPN DB - UPS DB	12 Way SPN Double door type DB for Power comprising of following:- Incomer : 32A DP MCB - 01 No <b>Outgoing :</b> 6/32A SP MCB - 12 Nos 16A SP MCB -05 Nos With all necessary connections	Each	0			
		c.2	8 Way SPN DB - UPS DB	8 Way SPN Double door type DB for Power comprising of following:- Incomer : 25A DP MCB - 01 No <b>Outgoing :</b> 16A SP MCB - 04 Nos 10A SP MCB - 02 Nos With all necessary connections	Each	2			
		c.3	6 Way SPN DB - UPS DB	6 Way SPN Double door type DB for Power comprising of following:- Incomer : 16A DP MCB - 01 No <b>Outgoing :</b> 10A SP MCB - 03 Nos 16A SP MCB - 1 No With all necessary connections	Each	0			

Sub Total of F.3.0								
	<b>F.4.0</b>			<b>Isolators /ELCB /RCBO &amp; SWITCH SOCKETS</b>				
	a.1			Supply , installation, testing comissioning of DP isolator of 25 A	Each	0		-
	a.2			Supply , installation, testing comissioning of DP isolator of 32 A	Each	3		-
	a.3			Supply , installation, testing comissioning of DP isolator of 40 A	Each	0		-
	a.4			Supply , installation, testing comissioning of DP MCB of 25 A	Each	0		-
	a.5			Supply , installation, testing comissioning of DP MCB of 32 A	Each	3		-
	a.6			Supply , installation, testing comissioning of DP MCB of 40 A	Each	2		-
	a.7			Supply , installation, testing comissioning of FP ELCB of 25 A, 100mA	Each	0		-
	a.8			Supply , installation, testing comissioning of FP ELCB of 40 A, 100mA	Each	0		-
	a.9			Supply , installation, testing comissioning of FP RCBO of 63 A, 100mA	Each	0		-
	a.10			Supply, Installation, testing comissioning of 10 amp TPN MCB	Each	0		-
	a.11			Supply, Installation, testing comissioning of 32 amp TPN MCB	Each	0		-
	a.12			Supply, Installation, testing comissioning of 40 amp TPN MCB	Each	0		-
	a.13			Providing and fixing TPN/DP enclosure box for indoor purpose	Each	0		-
	a.14			Providing and fixing TPN/DP enclosure box (Weather Proof) for outdoor purposes	Each	0		-
	a.15			Providing and Fixing 16 amp single phase Industrial socket	Each	0		-
	a.16			Providing and Fixing 25 amp single phase Industrial socket	Each	0		-
	a.17			Providing and Fixing 25 amp three phase Industrial socket	Each	0		-
	b			ISOLATOR - (BEFORE SERVO STABILIZER)				
	b.1			125A FP, 25kA Thermal Magnetic based MCCB with LSIG Protection with Box (As per the instruction of the Engineer Incharge)	Each	0		-
	b.2			100A FP, 25kA Thermal magnetic based MCCB with LSIG Protection with Box(As per the instruction of the Engineer Incharge)	Each	1		-
	c			6/16 Amp Electrical Top	Each	6		-
			Light Point Wiring Specifications	Point wiring shall include FRLS wire with all necessary "MMS PVC CONDUIT", with all fittings , accessories , couplings, collars etc., junction / pull / inspection boxes, wires, supports, bushings lamp holders, ceiling rose, flexible conduit, fan hooks wherever required, modular switch, switch box, Fan electronic regulator & terminations using tinned copper lugs of crimping type with cheising and scaffolding. The scope of sub mains wiring from Panel to DB are excluded. All wiring should be terminated with coupler & connectors. All lighting fixture wiring shall be carried out for primary point using 1.5sqmm copper stranded & for secondary wiring 1sqmm copper stranded conductor 660/1100V grade PVC insulated wire in "PVC Conduit". Individual junction/inspection boxes shall be provided for each lighting fitting for the purpose of looping from fitting to fitting. <b>From switch board/DB to first light fitting will be termed as primary point and First fitting to subsequent fitting on the same circuit shall be as termed secondary point. Light point wiring shall excluded submains wiring from Panel to DB. The scope of light point wiring starts after switch board/DB where switching control is directly from DB.</b>				
	d		Lighting points with PVC conduit	Wiring for the following light points with 2X1.5 sq mm PVC insulated copper conductor 650V grade FRLS wires in concealed or surface mounted 20/25mm dia MMS PVC conduit as required including providing 6 amps flush type PVC moulded switches, cover plate, 5 sided 1.2mm thick G.I. Box one module for housing switches and earthing of the fixtures and outlet box with 1.5 mm PVC insulated copper conductor 650V grade green earth wire.(switches-as/approved make)- <b>upto 10 Mt. wire length is inclusive.</b>				
	d.1			Primary (First) light point controlled by a 6A switch.	Nos	5		-
	d.2			Primary (First) light point controlled by a MCB in the DB.	Nos	5		-
	d.3			Secondary (Loop) light point looped to first point and so on.(upto 6 mtr) wire length	Nos	10		-
	d.4			Supply, Installation, Testing & Commissioning of mains with 2 X 1.5 sq.mm and earth wire 1.5 sqmm FRLS PVC copper wire ,in rigid MMS PVC conduit min.25 mm dia, for light/fan/exhaust point from DB to point including all required accessories,etc as per specification.( <b>If wire length increase above 10 mt mentioned in lighting circuit</b> )	RMT	10		-
	d.5			Supply, Installation, Testing & Commissioning of mains with 2 X 2.5 sq.mm and earth wire 2.5 sqmm FRLS PVC copper wire ,in rigid MMS PVC conduit min.20 mm dia,including all required accessories,etc as per specification.	RMT	0		-
	d.6			Supplying & erecting mains with 2x4 sq.mm and earth wire 2.5 sqmm FRLS PVC copper wire laid with conduit/trunking/inside pole/Bus bars or any other places.	RMT	5		-
	e		Lighting points with MS conduit	Wiring for the following light points with 2X1.5 sq mm PVC insulated copper conductor 650V grade FRLS wires in concealed or surface mounted 20/25mm dia MS conduit as required including providing 6 amps flush type PVC moulded switches, cover plate, 5 sided 1.2mm thick G.I. Box one module for housing switches and earthing of the fixtures and outlet box with 1.5 mm PVC insulated copper conductor 650V grade green earth wire.(switches-as/approved make)- <b>upto 10 Mt. wire length is inclusive.</b>				
	e.1			Primary (First) light point controlled by a 6A switch.	Nos.	0		-
	e.2			Primary (First) light point controlled by a MCB in the DB.	Nos.	0		-
	e.3			Secondary (Loop) light point looped to first point and so on.(upto 6 mtr) wire length	Nos.	0		-
	e.4			Supply, Installation, Testing & Commissioning of mains with 2 X 1.5 sq.mm and earth wire 1.5 sqmm FRLS PVC copper wire ,in rigid MS conduit min.25 mm dia, for light/fan/exhaust point from DB to point including all required accessories,etc as per specification.( <b>If wire length increase above 10 mt mentioned in lighting circuit</b> )	Rmtr	0		-
	e.5			Supply, Installation, Testing & Commissioning of mains with 2 X 2.5 sq.mm and earth wire 2.5 sqmm FRLS PVC copper wire ,in rigid MS conduit min.20 mm dia,including all required accessories,etc as per specification.	Rmtr	0		-
	f			<b>Power Point wiring</b> All switch socket wiring shall be carried out for primary point using 3x2.5 sq mm wire in "PVC Conduit" for connection of 6/16amp socket. Individual junction/inspection boxes shall be provided for each Power Point for the purpose of looping with cheising and scaffolding work if required .Inclusive of all G.I. Boxing and wire termination & MMS conduit etc. From DB to first switch socket will be termed as primary point and First socket to subsequent looping on the same circuit shall be as termed secondary point. Power point wiring shall excluded submains wiring from Panel to D.B. The scope of Power point wiring starts after DB where switching control is directly from DB.upto 10 Mt. wire length is inclusive.				
	f.1			First Point wiring with 6A,5pin wall socket outlet and controlled by a 6A switch	Nos	3.0		-
	f.2			Extra loop point wiring with 6A, 5 pin wall socket outlet and controlled by a 6A switch upto 6 mtr length	Nos	10		-
	f.3			First Point wiring with 16A,5pin wall socket outlet and controlled by a 16A switch	Nos	2		-
	f.4			Extra loop point wiring with 16A, 5 pin wall socket outlet and controlled by a 16A switch upto 6 mtr length	Nos	5		-
	f.5			Additional 6 Amp Switch & socket outlet in G.I. Box on modular cover plate adjoining and looped from the existing point. (Note:-additional means switch socket in modular box and plate adjoining the existing one on the same circuit.) Wire will be paid in Rmt separately	Nos			-

				All switch socket wiring shall be carried out for primary point using 3X4 sq mm wire in "PVC Conduit" for connection of 16 amp socket . Individual junction/inspection boxes shall be provided for each Power Point for the purpose of looping with cheisling and scaffolding work if required .Inclusive of all G.I. Boxing and wire termination & MMS PVC conduit etc. From DB to first switch socket will be termed as primary point and First socket to subsequent looping on the same circuit shall be as termed secondary point. Power point wiring shall excluded submains wiring from Panel to D.B. The scope of Power point wiring starts after DB where switching control is directly from DB.upto 12 Mt. wire length is inclusive.					
			g						
			g.1	First Point wiring with 16A, 3Pin combined shuttered wall socket outlet and controlled by a 16A one way switch with indicator.	Nos	5			-
			g.2	Extra loop point wiring with 16A, 3Pin combined shuttered wall socket outlet and controlled by a 16A one way switch with indicator.upto 6 mtr wiring	Nos	15			-
			g.3	Additional 16 Amp Switch & socket outlet in G.I. Box on modular cover plate adjoining and looped from the existing point. (Note:- additional means switch socket in modular box and plate adjoining the existing one on the same circuit.) . Wire will be paid in Rmt separately	Nos				-
			g.4	Supply and Laying of Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core wire in surface/recessed medium class MMS PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Rmtr	142			-
			h	<b>Power Point wiring(MS conduit)</b>					
				All switch socket wiring shall be carried out for primary point using 3x2.5 sq mm wire in "MS Conduit" for connection of 6/16amp socket. Individual junction/inspection boxes shall be provided for each Power Point for the purpose of looping with cheisling and scaffolding work if required .Inclusive of all G.I. Boxing and wire termination & MMS conduit etc. From DB to first switch socket will be termed as primary point and First socket to subsequent looping on the same circuit shall be as termed secondary point. Power point wiring shall excluded submains wiring from Panel to D.B. The scope of Power point wiring starts after DB where switching control is directly from DB.upto 10 Mt. wire length is inclusive.					
			h.1	First Point wiring with 6A,5pin wall socket outlet and controlled by a 6A switch	Nos	0			-
			h.2	Extra loop point wiring with 6A, 5 pin wall socket outlet and controlled by a 6A switch upto 6 mtr length	Nos	0			-
			h.3	First Point wiring with 16A,5pin wall socket outlet and controlled by a 16A switch	Nos	0			-
			h.4	Extra loop point wiring with 16A, 5 pin wall socket outlet and controlled by a 16A switch upto 6 mtr length	Nos	0			-
			i	All switch socket wiring shall be carried out for primary point using 3X4 sq mm wire in "MS Conduit" for connection of 16 amp socket . Individual junction/inspection boxes shall be provided for each Power Point for the purpose of looping with cheisling and scaffolding work if required .Inclusive of all G.I. Boxing and wire termination & MMS PVC conduit etc. From DB to first switch socket will be termed as primary point and First socket to subsequent looping on the same circuit shall be as termed secondary point. Power point wiring shall excluded submains wiring from Panel to D.B. The scope of Power point wiring starts after DB where switching control is directly from DB.upto 12 Mt. wire length is inclusive.					
			i.1	First Point wiring with 16A, 3Pin combined shuttered wall socket outlet and controlled by a 16A one way switch with indicator.	Nos	0			-
			i.2	Extra loop point wiring with 16A, 3Pin combined shuttered wall socket outlet and controlled by a 16A one way switch with indicator.upto 6 mtr wiring	Nos	0			-
			j	Conduiting					
			j.1	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall/floor and making good the same in case of recessed conduit as required.					
			j.1	20 mm	Rmtr	50			-
			j.2	25 mm	Rmtr	50			-
			j.3	32 mm	Rmtr	0			-
			j.4	40 mm	Rmtr	0			-
			j.5	50 mm	Rmtr	0			-
			k	Supplying and fixing of following sizes of MS conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.					
			k.1	20 mm	Rmtr	0			-
			k.2	25 mm	Rmtr	0			-
			k.3	32 mm	Rmtr	0			-
			k.4	40 mm	Rmtr	0			-
			k.5	50 mm	Rmtr	0			-
			l	Supplying & erecting MMS PVC flexible Conduit 25 mm dia.conforming to I.S. and approved make with required number of couplings, bushes, check nuts etc.	Rmtr	0			-
			m	Supplying & erecting M.S flexible Conduit 25 mm dia.conforming to I.S. and approved make with required number of couplings, bushes, check nuts etc.	Rmtr	17			-
			n	Supplying & erecting PVC flexible Conduit 50 mm dia.conforming to I.S. and approved make with required number of couplings, bushes, check nuts etc.	Rmtr	10			-
			o	Supply, Installation, Testing & Commissioning of G.I Conduit 32mm dia with necessary accessories in wall/floor with chiselling appropriately as per specification.	Rmtr	0			-
			p	Supply, Installation, Testing & Commissioning of G.I conduit 25 mm in dia with necessary accessories in RCC work/false ceiling/false flooring as per specification	Rmtr	0			-
Sub Total of F.4.0									-
			F.5.0	<b>LT CABLES &amp; TERMINATIONS</b>					
			a	SUPPLY AND LAYING OF THE CABLES					
			a.1	Supply, Erecting, Termination & Commissioning of following sizes of 1.1 KV grade FRLS Armoured/Unarmoured Copper/ Aluminum conductor cables laid over MS supports cable racks/trays or fixing on walls including clamping the cable to supports cable racks or fixing on walls including lugs, double compression gland and joints complete in an approved manner as required.					
			a.1	4Cx16 Sq.mm AL Arm. XLPE	Rmtr				-
			a.2	4Cx25 Sq.mm AL Arm. XLPE	Rmtr				-
			a.3	3Cx2.5 Sqmm Cu. Arm. XLPE	Rmtr				-
			a.4	3Cx4 Sqmm Cu. Arm. XLPE	Rmtr				-
			a.5	3.5Cx35 Sq.mm AL Arm. XLPE	Rmtr				-
			a.6	3.5Cx50 Sq.mm AL Arm. XLPE	Rmtr	0			-
			a.7	3.5Cx70 Sq.mm AL Arm. XLPE	Rmtr	6			-
			a.8	3.5Cx95 Sq.mm AL Arm. XLPE	Rmtr				-
			a.9	4Cx2.5 Sq.mm Cu. Arm. XLPE	Rmtr				-
			a.10	4Cx4 Sq.mm Cu. Arm. XLPE	Rmtr				-
			a.11	4C x 6 sq.mm Cu. Arm. XLPE	Rmtr	0			-
			a.12	4Cx10 Sq.mm Cu. Arm. XLPE	Rmtr	4			-
			a.13	4C x 16 sq.mm Cu. Arm. XLPE	Rmtr	0			-



